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feature set reduction
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Brief Summary Text - BSTX (7):

Poor feature sets **cause a number of difficulties for automatic** classification. The use of too few features results in poor classification accuracy. However, using too many features also decreases overall classification accuracy. This counter-intuitive "performance peaking" phenomenon is due to the "curse of dimensionality," and affects all classifiers, whether neural network or classical. Thus, feature reduction, identifying and removing features that do not enhance classification performance, plays an important part in feature set design. Superfluous

features contribute "opportunities" for misclassification and should be eliminated to improve system robustness. Furthermore, the complexity and cost of feature measurement systems and pattern recognition systems are directly related to the number of computed features. Consequently, from both a performance and economic perspective, it is important to have effective feature reduction algorithms.